

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: io LED

Report Number: P#

Luminaire Tested: **LSSQWM2B10FL409035D010 2LBD*LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P#
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29152)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LSSQWM2B10FL409035D010 2LBD*LI
Description: 1000 Lumen, 2inch Portfolio LED Cylinder
FLOOD OPTIC
SPUN ROUND TRIM WITH LI FINISH
Light Source: -
Ballast/Driver: -

Summary

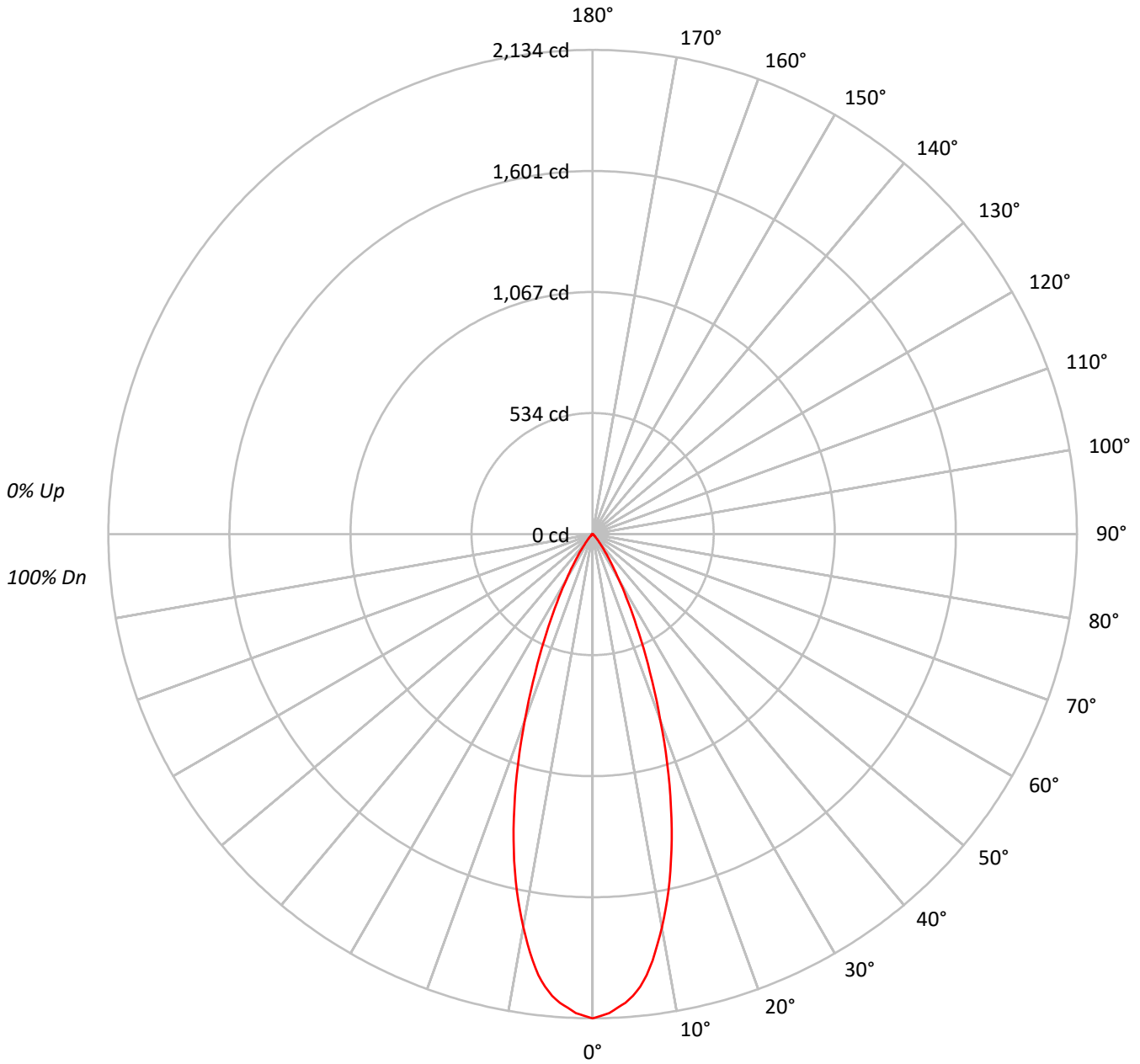
Lumens per Lamp: N/A
Luminaire Lumens: 861.9 lumens
Efficiency: N/A
Efficacy: 83.7 lumens/watt
Spacing Criteria (0/90/45): 0.59 / 0.59 / 0.58
Luminous Opening: Rectangular (W 0.17' x L: 0.17' x H: 0')
CIE Type: Direct

Input Watts (W): 10.3
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: LSSQWM2B10FL409035D010 2LBD*LI

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|---|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|
| RF | 20 | | | | | | | | | 20 | | | | | | | | | 20 | | | | | | | | | 20 | | | | | | | | | | | | | | | | | |
| RC | 80 | | | | | | | | | 50 | | | | | | | | | 30 | | | | | | | | | 10 | | | | | | | | | 0 | | | | | | | | |
| RW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 | | | | | | | | | | | | | | | |
| RCR | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 114 | 112 | 110 | 108 | 112 | 110 | 108 | 106 | 106 | 105 | 103 | 102 | 101 | 100 | 99 | 98 | 97 | 96 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 110 | 106 | 103 | 100 | 108 | 104 | 101 | 99 | 101 | 99 | 97 | 98 | 96 | 95 | 96 | 94 | 93 | 91 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 106 | 101 | 96 | 93 | 104 | 99 | 95 | 92 | 97 | 94 | 91 | 94 | 92 | 90 | 92 | 90 | 88 | 87 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 102 | 96 | 91 | 88 | 100 | 95 | 90 | 87 | 93 | 89 | 86 | 91 | 88 | 85 | 89 | 86 | 84 | 83 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | 98 | 91 | 86 | 83 | 97 | 90 | 86 | 83 | 89 | 85 | 82 | 87 | 84 | 81 | 86 | 83 | 81 | 79 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | 94 | 87 | 82 | 79 | 93 | 86 | 82 | 79 | 85 | 81 | 78 | 84 | 80 | 78 | 83 | 79 | 77 | 76 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | 91 | 83 | 79 | 75 | 90 | 83 | 78 | 75 | 82 | 78 | 75 | 81 | 77 | 74 | 80 | 76 | 74 | 73 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | 88 | 80 | 75 | 72 | 87 | 80 | 75 | 72 | 79 | 74 | 71 | 78 | 74 | 71 | 77 | 73 | 71 | 70 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | 85 | 77 | 72 | 69 | 84 | 76 | 72 | 69 | 76 | 71 | 69 | 75 | 71 | 68 | 74 | 71 | 68 | 67 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | 82 | 74 | 69 | 66 | 81 | 74 | 69 | 66 | 73 | 69 | 66 | 72 | 68 | 66 | 72 | 68 | 66 | 65 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|--------|
| | 0° |
| 0° | 826790 |
| 5° | 794526 |
| 10° | 691616 |
| 15° | 540080 |
| 20° | 359195 |
| 25° | 205660 |
| 30° | 102246 |
| 35° | 47002 |
| 40° | 18861 |
| 45° | 8600 |
| 50° | 3977 |
| 55° | 2229 |
| 60° | 1317 |
| 65° | 0 |
| 70° | 0 |
| 75° | 0 |
| 80° | 0 |
| 85° | 0 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 186.0 | 21.6 |
| 10°-20° | 365.2 | 42.4 |
| 20°-30° | 226.0 | 26.2 |
| 30°-40° | 67.6 | 7.8 |
| 40°-50° | 13.5 | 1.6 |
| 50°-60° | 3.3 | 0.4 |
| 60°-70° | 0.2 | 0.0 |
| 70°-80° | 0.0 | 0.0 |
| 80°-90° | 0.0 | 0.0 |
| 90°-100° | 0.0 | 0.0 |
| 100°-110° | 0.0 | 0.0 |
| 110°-120° | 0.0 | 0.0 |
| 120°-130° | 0.0 | 0.0 |
| 130°-140° | 0.0 | 0.0 |
| 140°-150° | 0.0 | 0.0 |
| 150°-160° | 0.0 | 0.0 |
| 160°-170° | 0.0 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 777.2 | 90.2 |
| 0°-40° | 844.8 | 98.0 |
| 0°-60° | 861.7 | 100.0 |
| 0°-90° | 861.9 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 861.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 2134 | |
| 5° | 2043 | 186 |
| 15° | 1347 | 365 |
| 25° | 481 | 226 |
| 35° | 99 | 68 |
| 45° | 16 | 14 |
| 55° | 3 | 3 |
| 65° | 0 | 0 |
| 75° | 0 | 0 |
| 85° | 0 | 0 |
| 90° | 0 | |



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CATALOG NUMBER: LSSQWM2B10FL409035D010 2LBD*LI

CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|--------|
| 0° | 2134.5 |
| 1° | 2122.9 |
| 2° | 2112.1 |
| 3° | 2090.6 |
| 4° | 2070.7 |
| 5° | 2043.4 |
| 6° | 2006.1 |
| 7° | 1958.9 |
| 8° | 1898.4 |
| 9° | 1829.7 |
| 10° | 1758.4 |
| 11° | 1684.7 |
| 12° | 1606.0 |
| 13° | 1524.0 |
| 14° | 1436.2 |
| 15° | 1346.8 |
| 17.5° | 1110.7 |
| 20° | 871.4 |
| 22.5° | 659.3 |
| 25° | 481.2 |
| 27.5° | 337.9 |
| 30° | 228.6 |
| 32.5° | 150.7 |
| 35° | 99.4 |
| 37.5° | 62.1 |
| 40° | 37.3 |
| 42.5° | 24.0 |
| 45° | 15.7 |
| 47.5° | 9.9 |
| 50° | 6.6 |
| 52.5° | 5.0 |
| 55° | 3.3 |
| 57.5° | 2.5 |
| 60° | 1.7 |
| 62.5° | 0.0 |
| 65° | 0.0 |
| 67.5° | 0.0 |
| 70° | 0.0 |
| 72.5° | 0.0 |
| 75° | 0.0 |
| 77.5° | 0.0 |
| 80° | 0.0 |
| 82.5° | 0.0 |



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CANDELA DISTRIBUTION (continued):

0°
90° | 0.0



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— 0°-180°







| | | |
|-------|--|-----|
| 85° | | 0.0 |
| 87.5° | | 0.0 |



(END OF REPORT)